

## NEW MEMBRACIDÆ. III

BY FREDERIC W. GODING

In a small lot of unnamed Membracidæ from Jamaica, forwarded to me for identification by Dr. Guy A. K. Marshall, director of the Imperial Bureau of Entomology, British Museum, were the following species: *Quadrinarea u-flava*, n. gen. et n. sp., 5 examples; *Marshallella rubripes*, n. gen. et n. sp., 7 examples; *Callicentrus aurifascia* Walk., 1 example; *Callicentrus cribratus* Walk., 2 examples; *Phormophora spreta*, n. sp., 1 example. They were collected by Mr. C. C. Gowdey, and are described below:

## Subfamily CENTROTINÆ

**Quadrinarea** new genus.

Head with eyes broad as width between humerals, triangular, base straight not sinuate; eyes small; clypeus not extended below loræ; ocelli even with center of eyes, some distant from each other and base of head. Pronotum convex, unarmed, with a median carina lightly sinuate at middle of dorsum, densely punctured anteriorly more sparingly behind middle, distinctly notched behind humerals exposing a little of sides of scutellum, and covered with fine pale hairs; posterior process robust, not tectiform, apical fourth acuminate from above and laterally to acute apex which reaches tips of tegmina. Tegmina nearly free; clavus partly covered by sides of pronotum, clear hyaline excepting coriaceous base, sides nearly parallel, apex obtusely rounded, destitute of a longitudinal vein; corium emitting 2 longitudinal veins from base, radial vein forked at middle enclosing 1st exterior discoidal cell, ulnar vein simple; 3 discoidal cells the 1st exterior cell stylate, 2d cell behind it sessile base truncate, the 3d or interior cell equal and contiguous to the others in length, situate between radial and ulnar veins, sessile, its base truncate at a transverse venule; 4 sessile apical cells bases truncate. Wings with 3 apical cells, 1st and 2d sessile bases truncate, 3d stylate, second cell large and nearly semicircular, the others small. Legs strong, tibiæ slender not dilated, tarsi equal. Type, *Quadrinarea u-flava*, n. sp.

This genus is near *Brachycentrotus* and *Gargara*; it differs from the former in shape of head, position of ocelli, dorsum not depressed, acute apex passing far beyond apex of clavus, forked radial and simple ulnar veins, sessile 2d exterior and interior discoidal cells, and but 4 apical cells; it differs from the latter in the subopaque tegmina, 3 discoidal and 4 apical cells.

To include this genus in the "Classification," page 300, in "36(1)" last clause read "Corium with 4 or 5 apical cells." On page 301, in "53(60)" read "corium with 2 or 3 discoidal cells," etc. On page 301, in 57(54) read:

"57(54). Wings with 3 apical cells.

a. Corium with 4 apical cells and 3 discoidal cells 1st exterior cell stylate; clavus destitute of longitudinal veins; posterior pronotal process almost covering scutellum.....QUADRINAREA, Godg.

aa. Corium with 5 apical cells and 2 discoidal cells; clavus with a longitudinal vein."

**Quadrinarea u-flava** new species.

Piceous and chestnut-brown with a large lemon-yellow U-spot opening forward. Head piceous margined with yellow, punctate. Pronotum piceous or fuscous anteriorly, lateral margins narrowly yellow from base to and including posthumeral sinus; posterior process chestnut-brown, a large U-shaped spot on dorsum opening forward, its sides extended on lateral margins and narrowly fuscous margined, and a narrow oblique band each side before apex, lemon-yellow. Tegmina opaque brown from bases to bases of apical cells which are clear hyaline, veins punctate with short pale hairs, a smooth coriaceous white crescent-shaped narrow band across middle, the color deepening behind it to form a large circular spot; apical limbus rather broad. Abdomen yellow, base and apex piceous. Legs pale brown, with short pale hairs, tarsi darker.

Type, ♀, long. 4 mm.; lat. 2 mm.; three ♀ paratypes similar to the type, and one ♀ variety which has the u-spot indicated only by a short narrow band each side extended upward from lateral margins.

Habitat: the type, and three paratypes, with the variety are from Hill Gardens, and one paratype from Mona, Jamaica, all in the British Museum, No. 579, excepting one paratype in my collection.

**Marshallella** new genus.

Head broad, nearly equal to breadth between humerals, roughly sculptured, apical margins of loræ moderately foliaceous below which the clypeus is lengthily produced, an indistinct median carina; eyes large, almost globular; ocelli equidistant, slightly above a line through center of eyes. Pronotum densely punctured and strongly sculptured, base broadly sinuate, with a median carina, convex, unarmed above the prominent humerals; posterior process broad at base, close to and covering large part of scutellum, sides notched behind humerals then gradually acuminate to slender subulate apex, long as abdomen far passing apex of clavus, strongly tectiform, lateral margins broadly flat and smooth, strongly impressed within. Scutellum well

developed, exposed sides punctured, apex emarginate. Tegmina clear hyaline, veins strong, punctate; margins of clavus nearly parallel, slightly narrowed toward obtusely rounded apex, with 2 veins the exterior vein not percurrent, the interior vein short, base coriaceous and opaque; corium with 3 longitudinal veins from base, ulnar veins joined close to base by a transverse venule, 1st ulnar vein forked front of middle, 2d ulnar vein simple, radial vein forked at middle; 3 discoidal cells, exterior cell sessile base truncate, middle cell some longer stylate, interior cell much larger and longer extended toward truncate base at venule between ulnar veins; 5 apical cells; all cells elongate, limbus rather broad. Wings with 4 apical cells and a large triangular anal cell, the 1st, 3d and anal cells stylate, the 3d narrow at base very much broadened toward apex, 2d and 4th cells sessile bases truncate. Legs strong, rather long, tibiae triquetrous covered with short pale hairs, tarsi equal. Type, *Marshallella rubripes*, n. sp.

This genus is near *Platycentrus* and *Orthobelus*; it differs from both in the unarmed pronotum, from the former in a shorter exterior claval vein, transverse venule between ulnar veins, and longer posterior pronotal process; from the latter also in the absence of several cellules. It differs from *Brachycentrotus* and *Monobelus* in the truncate base of the exterior discoidal cell of corium, and from the former in the much longer posterior pronotal process, 2 claval veins, and position of ocelli, but has the extended clypeus. Dedicated to Dr. Guy A. K. Marshall.

To include this genus in the "Classification," on page 301, between "61(64)" and "62(63)" insert

"a. Pronotum unarmed above humerals.....MARSHALLELLA, Godg.

aa. Pronotum cornute above each humeral."

**Marshallella rubripes** new species.

Creamy-white, head and dorsum black, legs and spot on base of tegmina bright scarlet. Head shining black, rugose, with a slight median carina, uneven, with short pale hairs. Pronotum convex, unarmed, coarsely punctured and sculptured, creamy-white with dorsum shining black from near base to a point on base of posterior process, extreme tip of apex piceous; humerals prominent. Scutellum piceous, sides punctured. Abdomen sordid piceous above sides pale clouded, margins of segments, ventral surface, and large lateral valves, pale yellow, ovipositor piceous. Tegmina clear hyaline, veins piceous and punctate, a short narrow yellow stripe and a large scarlet spot near bases; legs bright scarlet, claws ferruginous.

Type, ♀, long. cum teg. 8.5 mm., to apex pronotum 7 mm.; lat. inter hum. 3.5 mm.; 6 paratypes similar in size and markings, one with tip concolorous creamy-white. The type and 5

paratypes in the British Museum, No. 1275; one paratype in my collection; all females.

Habitat: Cinchona, Jamaica (Gowdey).

Subfamily SMILINÆ

**Phormophora spreta** new species.

Grayish-yellow without spots, base and lateral margins of pronotum toward apex narrowly, the punctures, and head, piceous; basal half of corium and 2d, 3d, and 4th apical cells opaque-brown, translucent; front and middle legs pale yellow, hind legs orange-yellow, tips of tarsi piceous.

Type, ♂, long. cum teg. 3.5 mm.; lat. 1 mm.; in the British Museum, No. 5791½.

Habitat: Mona, Jamaica, (Gowdey).

It differs from *maura* and *dorsata* of Fabricius, the only species placed in this genus, in being smaller, ground color not black, and without spots.